

## United States Patent and Trademark Office

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APPLICATION NO FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO	
09.890,127	07 27 2001	Makoto Kai	OGOH:086 5977		
75	90 02 28 2003				
Parkhurst & Wendel Suite 210 1421 Prince Street			EXAMINER PHINNEY, JASON R		
			2879		
			DATE MAILED: 02-28-2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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Office Action Summary		09/890,127		KAI ET AL.					
		Examiner		Art Unit					
		Jason Phinney		2879					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address									
Period for Reply									
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION usions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication, period for reply specified above is less than thirty (30) days, a re- period for reply is specified above, the maximum statutory perion re to reply within the set or extended period for reply will, by statu- eply received by the Office later than three months after the mailing digital patent term adjustment. See 37 CFR 1 704(b)	, .136(a). In no event, howe ply within the statutory min d will apply and will expire te, cause the application to	iver, may a reply be time imum of thirty (30) days SIX (6) MONTHS from to become ABANDONED	ely filed will be considered timely. he mailing date of this comr (35 U.S.C. § 133).	nunication.				
otatus 1)⊡	Responsive to communication(s) filed on 09	October 2001							
ائـا(ا □2a)		his action is non-fi	nal						
<u> </u>	,				morito io				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims									
4) Claim(s) 1-10 is/are pending in the application.									
, —	4a) Of the above claim(s) is/are withdrawn from consideration.								
6)[-									
7)	Claim(s) is/are objected to.								
8)	Claim(s) are subject to restriction and/	or election require	ment.						
Application Papers									
9) ☐ The specification is objected to by the Examiner.									
10)  The drawing(s) filed on <u>27 July 2001</u> is/are a)  accepted or b)  objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11) The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)[	a)⊠ All b)□ Some * c)□ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 6)		(PTO-413) Paper No(s) atent Application (PTO-1					
S. Patent and Tr	ademark Office								

Application No.

Applicant(s)

Application/Control Number: 09/890,127

Art Unit: 2879

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2 Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,204,578 to Dever.

Regarding Claim 1, Dever discloses a lamp device (Figure 4, #90) comprised of a discharge lamp, with an arc tube (Figure 3, #62) containing luminescent materials (Column 5, Lines 21-23) and having a pair of electrodes (Figure 3, #'s 72 and 74) and a pair of sealed portions extending from the arc tube (Figure 3, #'s 76 and 78). Dever further discloses that the lamp device should comprise a reflector (Figure 4, #92) and a transparent member (Figure 4, #94) covering an end of the reflector with the discharge lamp in the space between the transparent member and the reflector. Dever finally discloses a means for preventing an excessive temperature rise wherein the temperature rise of the welded parts of the wiring members electrically connected to the electrodes is restricted (Figure 3, #64).

Regarding Claim 2, Dever further discloses that the sealed portions should have a foil sealed construction (Figure 3, #'s 82 and 84).

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3. Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,957,570 to Ooyama.

Regarding Claim 1, Ooyama discloses a lamp device (Figure 1) comprised of a discharge lamp, with an arc tube (Figure 1, #10 and Column 2, Lines 50-52) containing luminescent materials (Column 2, Lines 55-57) and having a pair of electrodes (Column 2, Lines 52-55) and a pair of sealed portions extending from the arc tube (Column 2, Lines 52-55). Ooyama further discloses that the lamp device should comprise a reflector (Figure 1, #20) and a transparent member (Figure 1, #30) covering an end of the reflector with the discharge lamp in the space between the transparent member and the reflector. Ooyama finally discloses a means for preventing an excessive temperature rise wherein the temperature rise of the welded parts of the wiring members electrically connected to the electrodes is restricted (See Figure 1, positioning of the sealed portion through an aperture in the transparent member serves to prevent an excessive temperature rise of the welded part of the wiring member).

Regarding Claim 6, Ooyama further discloses that there should be a way to channel heat such that the heat from the sealed portion disposed on the side of the transparent member is conducted to the exterior of the lamp device (See Figure 1, positioning of the sealed portion through an aperture in the transparent member serves to conduct heat to the exterior of the lamp device).

Regarding Claim 7, Ooyama further discloses that the sealed portion disposed on the side of the transparent member is made integral with the transparent member (see Figure 4a and 4b).

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Regarding Claim 8, Ooyama further discloses that the front end of the sealed portion disposed on the side of the transparent member projects into the exterior of the transparent member (See Figure 1)

Regarding Claim 9, Ooyama further discloses that the lamp device should include cooling means for removing heat conducted to the exterior of the lamp device (Column 3, Lines 33-43 discloses that forced air from fans can be used to remove the heat from the exterior of the lamp device).

4. Claim 10 is rejected under 35 U S.C. 102(b) as being clearly anticipated by Japanese Patent Publication No. 11-317196 to Ichiro

Ichiro discloses a discharge lamp comprising an arc tube (Figure 1, #3) enclosing luminescent materials (Means for Solving the Problem, Paragraph 1 teaches that Mercury should be contained within the arc tube) and having disposed therein a pair of opposing electrodes (Figure 1, #'s 5 and 6) and having a pair of sealed portions, each having a different length, extending from the arc tube (Figure 1, #'s 23 and 24 with lengths  $L_{down}$  and  $L_{up}$  respectively).

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made

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6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,204,578 to Dever in view of Japanese Patent Publication No. 11-317196 to Ichiro.

Dever discloses all of the limitations of Claim 1 as described above.

Regarding Claim 3, Dever fails to exemplify that the inside space of the reflector and the transparent member should be hermetically sealed.

Regarding Claim 4, Dever fails to exemplify that the pair of sealed portions should have different lengths and that the longer sealed portion should be on the side of the transparent member and the shorter sealed portion should be on the side of the base of the reflector.

Regarding Claim 5, Dever fails to exemplify that the end of the sealed portion of Claim 4 on the side of the transparent member should be positioned near the transparent member

Ichiro, in an alternate lamp device teaches that the inside space of the reflector and the transparent member should be hermetically sealed in order to deaden the noise produced in the event of the explosion of the discharge lamp (See Means for Solving the Problem, Paragraph 1). Ichiro also teaches that the pair of sealed portions should have different lengths such that the longer sealed portion should be on the side of the transparent member and the shorter sealed portion should be on the side of the base of the reflector (Figure 1, #'s 23 and 24 with lengths  $L_{down}$  and  $L_{up}$  respectively) and should be positioned such that the sealed portion on the side of the transparent member is near the transparent member (See Figure 3). This arrangement is used to limit the temperature rise in the upper sealed portion (See Embodiment, Paragraph 5).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to seal the reflector and transparent member together and to use the sealed portion lengths and positions taught by Ichiro in the lamp device of Devers in order to minimize

the sound in the event of an explosion and to limit the temperature rise in the upper sealed portion

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Phinney whose telephone number is (703) 305-3999. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

February 21, 2003

NIMESHKUMAR D. PATEL SUPERVISORY PATENT EXAMINEM TECHNOLOGY CENTER 2800